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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KOSSON, ROSANNE

ART UNIT PAPER NUMBER

1651

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,845

Applicant(s)

LUCIO MAGRI, JUAN BAUTISTA
MARIO

Examiner

Rosanne Kosson

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on telephone interview of 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Telephone Interview

In a telephone interview with Applicant's representative, Mr. Jonathan Hines, on May 21, 2004, Mr. Hines pointed out that a preliminary amendment had been filed with the application. The claims as amended have been considered, and this Supplemental Office Action is based on the amended claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Amendment of the claims so that they are written in standard English and comply with U.S. patent practice is required. In particular, claim 1 recites a "general use culture medium." "General use" is vague and indefinite, and the intended meaning cannot be determined. For example, what one person would consider a general use culture medium, another person would not. Also, a general use culture medium may be considered to be one that supports the

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growth of a wide range of organisms or that may be used under a wide range of growth conditions. The specification does not indicate the range of microorganisms with which the culture medium can be used or the range of the conditions under which the culture medium can be used. Therefore, the specification does not support the recitation of this term in the claim, and clarification is required.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2, step II) has been amended to recite that 10% of the final volume of the peat of step I) is transferred to the fermentor where the culture medium is to be prepared. Nevertheless, claim 2 recites that "5 to 20% peat" is incorporated into the inoculating composition. It is unclear whether the percentage refers to percent by weight or percent by volume. Clarification is required.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 is directed to a concentrated inoculating composition obtained by the method of step 1. Claim 3 recites, however, that the inoculating composition comprises lactose saccharides. Lactose and maltose are different sugars, and claim 1 does not recite lactose saccharides. Clarification or correction is required.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites "5 to 20% thereof peat" in the inoculating

composition. It is unclear whether the percentage refers to percent by weight or percent by volume. It is also unclear to what "thereof" refers. Clarification is required.

Withdrawn Claim Rejections - 35 USC § 112

Claim 1, step c, 1) has been amended to delete the term "previous" and to indicate what is dissolved in 100 L of water. Therefore, this rejection of claim 1, step c, for being unclear is withdrawn.

Claims 1 and 3 have been amended to delete the phrase "preferably soybeans, alfalfa and beans." Therefore, this rejection of claims 1 and 3 for being unclear is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. (U.S. 3,168,796), Kuykendall et al. (Applied and Environmental Microbiology 22(4):511-519, 1976) and Bergey's Manual (Bergey's Manual of Determinative Microbiology, 8th Ed., R.E. Buchanan & N.E. Gibbons, eds., pp. 262-264, The Williams &

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Wilkins Co., Baltimore, 1974) in view of Guri et al. (U.S. 5,750,402) and Jung et al. (U.S. 4,755,468). Scott discloses a general use culture medium comprising grown *Rhizobium japonicum* and disaccharides, as well as a method for making for this medium, and notes that the Rhizobium may be grown using standard procedures well known in the art (see column 5, lines 13-36, and column 5, line 73, to column 6, line 15). Kuykendall also discloses a general use culture medium comprising grown *Rhizobium japonicum* and sterilized sugars, including maltose, as well as a method for making for this medium (see p. 512, Materials and Methods, and p. 516, 2d paragraph). Kuykendall notes that the Rhizobium grew equally well on 10 different carbon sources, including five different sugars. Indeed, all species of Rhizobia are known to utilize a wide range of carbohydrates (see Bergey's Manual of Determinative Bacteriology, 8th Ed., pp. 262-264). Guri discloses that potassium sorbate is a known microbicide that can be used with plant growth media (see column 3, lines 53-59, and column 4, lines 45-65) and cites, i.a., the Merck Index, which lists potassium sorbate as a mold and yeast inhibitor. Jung discloses a plant growth medium comprising grown *Rhizobium japonicum* and that fungicides may be added to the medium without altering the bacterial cells (see column 6, lines 7-13, and column 7, lines 23-25).

Thus, one of ordinary skill in the art would be motivated to modify the medium of Scott or Kuykendall to include the fungicide potassium sorbate because, as noted in Guri, plant culture media are subject to contamination by unwanted organisms. Adding an antimicrobial agent helps maintain sterile conditions to allow for proper growth of the plant to be inoculated into the medium (see column 1, Field of the Invention). The

skilled artisan would further note from Jung that a fungicide may be used in a plant growth medium containing *Rhizobium japonicum* without harming the Rhizobium.

Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. (U.S. 3,168,796), Kuykendall et al. (Applied and Environmental Microbiology 22(4):511-519, 1976) and Bergey's Manual (Bergey's Manual of Determinative Microbiology, 8th Ed., R.E. Buchanan & N.E. Gibbons, eds., pp. 262-264, The Williams & Wilkins Co., Baltimore, 1974) in view of Guri et al. (U.S. 5,750,402) and Jung et al. (U.S. 4,755,468) as applied to claims 1 and 3 above, and further in view of Kosanke et al. (U.S. 5,695,541) or Gleddie et al. (U.S. 5,586,411). As discussed above, claims 1 and 3 are considered obvious over Scott/Kuykendall/Bergey's Manual /Guri and Jung. None of the cited references discloses the use of peat in a Rhizobium-containing medium, as recited in claims 2 and 4. Kosanke, however, discloses that it is known in the relevant art to mix living rhizobial cultures with peat as a carrier when the rhizobial cultures are to be used as an inoculant for leguminous plants. Peat supplies moisture to the rhizobia to maintain them in a living state (see column 1, lines 24-33). Thus, the skilled artisan would be motivated to add peat to a Rhizobium-containing growth medium, as taught by Kosanke, in order to maintain the viability of the rhizobium and improve the properties of the growth medium. Gleddie discloses that, although peat is the carrier of choice for the rhizobial inoculant industry, peat that has been sterilized prior to mixing with rhizobial cells provides the highest quality, most stable and most efficacious rhizobial inoculant. Using peat that has not been presterilized can introduce microbial contaminants that adversely affect the properties of the inoculant (see column 1, line 56, to column 2, line

11). As a result, the skilled artisan would be motivated to use presterilized peat in preparing a Rhizobium-containing growth medium, as taught by Gleddie, in order to produce a high-quality medium free of contaminants. Therefore, a holding of obviousness is required.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosanne Kosson whose telephone number is 571-272-2923. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rosanne Kosson
Examiner
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2004-05-24



FRANCISCO PRATS
PRIMARY EXAMINER